AMENDMENTS TO THE CLAIMS

Claims 1-11 (Cancelled)

12. (Currently Amended) A method for managing a broadband modem, comprising:

transmitting a discovery signal over a connection;

entering a connect state in response to receiving a discovery acknowledge signal;

recording a media access control (MAC) address corresponding to the broadband

modem, ~~that transmitted~~ the broadband modem to transmit the discovery

acknowledge signal in response to the discovery signal; and

transmitting a terminate message to other broadband modems connected to the

connection.

13. (Currently Amended) The method of ~~Claim~~ claim 12, further comprising

specifying data formats ~~that may be~~ supported in the discovery signal.

14. (Currently Amended) The method of ~~Claim~~ claim 12, further comprising

recording a data format selected by the broadband modem in the discovery

acknowledge signal.

15. (Currently Amended) The method of ~~Claim~~ claim 12, further comprising:

sending a poll message to the broadband modem; and

entering a disconnect state if a poll acknowledge message is not received in

response to the poll message within a predefined period of time.

16. (Currently Amended) The method of ~~Claim~~ claim 12, further comprising

transmitting a sleep message to the broadband modem indicating that its binding

client system is about to enter into a sleep state.

17.   (Currently Amended) A method for managing a broadband modem, comprising:

transmitting a discovery acknowledge signal over a transmission medium in

response to receiving a discovery signal from a first client system; ~~and~~

~~entering a connect state.~~

forwarding ATM cells between the first client computer system and an ADSL;

generating and verifying a header error control (HEC) field in the ATM cell;

entering a sleep state and disabling an activity timer upon receiving a sleep

message from the first client computer system;

entering a connect state upon receiving a wake-up event from a second client

computer system; and

entering a disconnect state if the poll message is not received from the first client

computer system within the predetermined period of time.

18.   (Currently Amended) The method of ~~Claim~~ claim 17, further comprising

specifying a data format ~~that may be~~ supported by the broadband modem among

data formats specified in the discovery signal.

19.   (Currently Amended) The method of ~~Claim~~ claim 17, further comprising:

transmitting a poll acknowledge message ~~to the client computer system~~ in

response to receiving ~~a~~ the poll message; and

entering ~~a~~ the disconnect state if the poll message is not received within a

predetermined period of time.

Claims 20-23 (Cancelled)

24.   (Currently Amended) A ~~computer-readable~~ machine-readable medium having stored thereon date including ~~a sequence~~ sets of instructions~~, the sequence of instructions including instructions~~ which, when executed by ~~a processor~~ machine, ~~causes~~ cause the ~~processor to perform the steps of~~ machine to:

~~transmitting~~ transmit a discovery signal over a connection;

~~entering~~ enter a connect state in response to receiving a discovery acknowledge signal;

~~recording~~ record a ~~media access control (MAC)~~ MAC address corresponding to the broadband modem, ~~that transmitted~~ the broadband modem to transmit the discovery acknowledge signal in response to the discovery signal; and

~~transmitting~~ transmit a terminate message to other broadband modems connected to the connection.

25.   (Currently Amended) The ~~computer-readable~~ machine-readable medium of ~~Claim~~ claim 24, ~~further comprising instructions which, when executed by the processor, causes the processor to perform the step of specifying~~ wherein the sets of instructions which, when executed by the machine, further cause the machine to specify data formats ~~that may be~~ supported in the discovery signal.

26.   (Currently Amended) The ~~computer-readable~~ machine-readable medium of ~~Claim~~ claim 24, ~~further comprising instructions which, when executed by the processor, causes the processor to perform the step of~~ wherein the sets of instructions which, when executed by the machine, further cause the machine to ~~recording~~ record a data format selected by the broadband modem in the discovery acknowledge signal.

27. (Original) The ~~computer-readable~~ machine-readable medium of ~~Claim~~ claim 24, ~~further comprising instructions which, when executed by the processor, causes the processor to perform the steps of:~~ wherein the sets of instructions which, when executed by the machine, further cause the machine to:

sending send a poll message to the broadband modem; and

entering enter a disconnect state if a poll acknowledge message is not received in response to the poll message within a predefined period of time.

Claims 28-29 (Cancelled)

30. (Currently Amended) A method for establishing an ~~asynchronous transfer mode~~ ~~(ATM)~~ ATM signal for transmitting an ATM cell from a first computer system to a second computer system, comprising:

transmitting the ATM cell from ~~a~~ the first computer system to a given one of a plurality of broadband modems, the plurality of broadband modems configured to operate as peripherals; ~~and~~

transmitting a discovery signal from ~~a~~ the second computer system to the plurality of broadband modems;

the given one of the plurality of broadband modems transmitting a discovery acknowledge signal to the second computer system in response to the discovery signal to establish a binding between the second computer system and the given one of the plurality of broadband modems; and

the second computer system entering into a connect state with the given one of the plurality of broadband modems to accept the ATM cell from the given broadband modem.

31.   (Currently Amended) The method of ~~Claim~~ claim 30, further comprising specifying data formats ~~that may be~~ supported in the discovery signal.

32.   (Currently Amended) A ~~computer-readable~~ machine-readable medium having stored thereon data including ~~a sequence~~ sets of instructions, ~~the sequence of instructions including instructions~~ which, when executed by a ~~processor~~ machine, ~~causes the processor~~ cause the machine to ~~perform~~:

~~transmitting~~ transmit a discovery signal over a connection;

~~transmitting~~ transmit the ATM cell from a first computer system to a given one of a plurality of broadband modems, the plurality of broadband modems configured to operate as peripherals; and

~~transmitting~~ transmit a discovery signal from a second computer system to the plurality of broadband modems;

the given one of the plurality of broadband modems ~~transmitting~~ transmit a discovery acknowledge signal to the second computer system in response to the discovery signal to establish a binding between the second computer system and the given one of the plurality of broadband modems; and

the second computer system ~~entering~~ enter into a connect state with the given one of the plurality of broadband modems to accept the ATM cell from the given broadband modem.

33.   (New) The machine-readable medium of claim 32, wherein the sets of instructions which, when executed by the machine, further cause the machine to specify data formats supported in the discovery signal.

34.   (New) The machine-readable medium of claim 32, wherein the sets of instructions which, when executed by the machine, further cause the machine to record a data

format selected by the given one of the plurality of broadband modems in the discovery acknowledge signal.

35.   (New) The method of claim 30, further comprising recording a data format selected by the given one of the plurality of broadband modems in the discovery acknowledge signal.

36.   (New) A system for establishing an ATM signal for transmitting an ATM cell from a first computer system to a second computer system, comprising:

the first computer system to transmit the ATM cell to a given one of a plurality of broadband modems, the plurality of broadband modems configured to operate as peripherals;

the second computer system coupled to the first computer system, the second computer system to transmit a discovery signal to the plurality of broadband modems;

the given one of the plurality of broadband modems to transmit a discovery acknowledge signal to the second computer system in response to the discovery signal to establish a binding between the second computer system and the given one of the plurality of broadband modems; and

the second computer system to enter into a connect state with the given one of the plurality of broadband modems to accept the ATM cell from the given broadband modem.

37.   (New) The system of claim 36, wherein data formats supported in the discovery signal are specified.

38.   (New) The system of claim 36, wherein a data format selected by the broadband modem in the discovery acknowledge signal is recorded.

39.   (New) A system for managing a broadband modem, comprising:

the broadband modem to

transmit a discovery acknowledge signal over a transmission medium in

response to receiving a discovery signal from a first client system;

forward ATM cells between the first client computer system and an

ADSL;

generate and verifying a header error control (HEC) field in the ATM cell;

enter a sleep state and disabling an activity timer upon receiving a sleep

message from the first client computer system;

enter a connect state upon receiving a wake-up event from a second client

computer system; and

enter a disconnect state if the poll message is not received from the first

client computer system within the predetermined period of time.

40.   (New) The system of claim 39, wherein data formats supported in the discovery

signal are specified.

41.   (New) The system of claim 39, wherein a data format selected by the broadband

modem in the discovery acknowledge signal is recorded.